

BILL # HB 2467

TITLE: mercury amalgam fillings

SPONSOR: Johnson

STATUS: As amended by House Rules

REQUESTED BY: House

PREPARED BY: Beth Kohler
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FISCAL YEAR

EXPENDITURES

	2003	2004	2005
General Fund	\$-0-	\$ 473,400	\$ 668,600
Tobacco Tax Funds	-0-	53,000	75,600
Federal Funds	-0-	<u>1,132,700</u>	<u>1,622,400</u>
Total	\$-0-	\$1,659,100	\$2,366,600

FISCAL ANALYSIS

Description

This bill prohibits dentists from placing mercury amalgam fillings in children under age 18, nursing mothers, and pregnant women. In addition, the bill requires dentists to inform patients of the health, biological, and environmental advantages and disadvantages of mercury amalgams, and options for completing the dental procedure using other materials. Finally, the bill requires dentists to post warnings about the dangers of exposure to mercury posed by mercury amalgam fillings.

Estimated Impact

The JLBC Staff determined the following agencies use state monies to provide dental services to the populations affected by the bill: the Arizona Health Care Cost Containment System (AHCCCS), the Department of Juvenile Corrections (DJC), the Department of Corrections (DOC), and the Department of Administration (ADOA). Because in many cases, mercury amalgam fillings are less expensive than fillings made from other substances (usually resin), if dentists are prohibited from using mercury amalgams, the costs of certain dental procedures may increase.

The JLBC Staff estimates this bill will have a General Fund impact of \$473,400 in FY 2004 and \$666,800 in FY 2005. In addition, the bill will increase expenditures from the Medically Needy Account of the Tobacco Tax and Health Care Fund by \$53,000 in FY 2004 and \$75,600 in FY 2005. Because this bill impacts AHCCCS programs that receive federal matching funds, we estimate that federal expenditures will increase by \$1.1 million in FY 2004 and \$1.6 million in FY 2005. The table below details the cost per agency.

	<u>FY 2004</u>	<u>FY 2005</u>
AHCCCS		
General Fund	\$ 463,600	\$ 664,600
Tobacco Tax	53,000	75,600
Federal Funds	<u>1,132,700</u>	<u>1,622,400</u>
Subtotal - AHCCCS	\$1,649,300	\$2,362,600
DJC	8,200	2,300
DOC	1,600	1,700
ADOA	<u>unknown</u>	<u>unknown</u>
Total	\$1,659,100	\$2,366,600

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Estimated Impact (Cont'd)

The various agencies affected by the bill have only provided cost estimates based on FY 2003 spending and enrollment figures. We used this source data to develop our FY 2004 and FY 2005 estimates.

The bill has potential savings associated with a reduction in illnesses that are known to be caused by exposure to mercury. If mercury amalgam fillings are ultimately proven to cause health problems, there could be potential savings associated with the prohibition of mercury amalgams (through a reduction spending on mercury-related illnesses). However, at this point, there is no scientific consensus on whether mercury amalgams cause mercury exposure significant enough to pose a health hazard, except in the rare cases of allergy.

Analysis

We determined that state monies are used to pay for dental procedures for the populations specified in the bill in the following agencies: AHCCCS, DHS, DJC, and DOC, and ADOA.

AHCCCS

AHCCCS pays for dental care in two ways: 1) through their capitation rates, which are a per member per month payment made to contracted health plans for the cost of care provided to enrolled members and 2) through the fee-for-service component of the program in which AHCCCS pays providers directly for services.

The capitation rates are determined by using prior year actual utilization and costs incurred by the health plans for providing care to the AHCCCS members. Therefore, for these members, AHCCCS does not directly pay for dental services, but rather these services are assumed to be included in the capitation rates. However, AHCCCS did provide us with an estimate of how much, on average, its health plans paid providers for both amalgam and resin fillings for children under age 18 in both the KidsCare and Acute programs from 10/01/00 and 9/30/01. During this time period, the health plans paid, on average, \$58.43 per mercury amalgam filling procedure, and \$76.26 per resin filling procedure. We then used these figures, adjusted for expected inflation and enrollment growth to estimate how much health plans would pay for dental services in FY 2004 and FY 2005. Based on these figures, if all AHCCCS children received resin fillings rather than mercury fillings, we would expect the cost to health plans to increase by \$1,347,700 in FY 2004. Of this amount, \$376,300 is from the General Fund which provides the state match for the acute care program, and \$45,000 is from the Medically Needy Account of the Tobacco Tax and Health Care Fund which provides the state match for the KidsCare program. The remainder is from federal matching funds for both programs.

Because capitation rates are calculated based upon actual costs incurred by the health plans, we expect these increases in costs to result in increased capitation rates. For the purposes of this analysis, we assumed that the capitation rate adjustments would be made for contract year 2004, which would result in increased costs beginning in October 2004. If the capitation rates are not adjusted until October 2005, this cost could be avoided until FY 2005.

For the AHCCCS fee-for-service population, we used estimates of the average amount paid per filling for both resin and amalgam fillings and adjusted these amounts for both caseload and inflation to determine the expected costs for FY 2004. We estimate that this change would increase AHCCCS fee-for-service costs by \$301,700 in FY 2004. Of this amount, \$87,200 is from the General Fund, \$8,000 is from the Medically Needy Account of the Tobacco Tax and Health Care Fund, and \$206,400 is from federal matching funds.

These estimates are for only the AHCCCS population under age 18. AHCCCS was not able to provide the number of amalgams provided to pregnant women or nursing mothers, but estimates that this number is small.

DHS

Historical data on dental procedures at the Arizona State Hospital indicate that this procedure is only rarely performed at the hospital, and therefore we do not believe the Department of Health Services (DHS) will face increased costs as a result of this bill. DHS concurs with this analysis.

DJC

In FY 2002, DJC performed 500 mercury amalgam filling procedures, at a cost of \$0.87 per filling. Because DJC dentists are salaried, this cost figure reflects only the materials used, not the labor costs (which are included in the dentists' salaries).

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Analysis (Cont'd)

Because the DJC currently does not use resin fillings, the department would have to purchase 4 Resin Curing Light Systems for \$1,480 each, which are required for the alternative fillings. In addition, the department estimates that each resin filling would cost \$5.37. The current JLBC Staff estimates of DJC clients anticipate no growth through FY 2005. Based upon these estimates, the total FY 2004 cost would be \$8,170, of which \$5,920 would be one time.

DOC

The DOC provided us with information on the number of mercury amalgam filling procedures they expected to perform in FY 2004 for minors at the Rincon Unit of the Tucson facility. The department was not able to provide us with their actual costs for mercury amalgam fillings as compared to resin fillings, but indicated that the AHCCCS fee schedule for those procedures could serve as a proxy for actual costs. However, the AHCCCS fee schedule includes cost differences associated with filling materials, labor, and office administration. Because the DOC dentists are salaried, the labor and administration costs would likely be absorbed into the dentists' salaries. Therefore, we believe using AHCCCS fees overstates the potential cost to DOC. However, in the absence of other cost information from the department, we used the AHCCCS fee schedule to determine the costs for the department. We adjusted these figures for caseload and inflation to estimate a total FY 2004 impact of \$1,600.

The department was not able to provide us with figures on the number of pregnant or nursing women in the prison population. We were not able to estimate the number of pregnant or nursing women in the prison population but we believe this population would be small.

Dental Board

The Dental Board reports that because A.R.S. § 32-1201.18(bb) currently requires dentists to inform patients about materials used in dental procedures, the bill will not result in increased investigation costs for the board. In addition, because of the existing requirements, the Board does not think the bill will result in increased costs to dentists associated with providing the information required in the bill to patients (because dentists are already providing similar information). Therefore, we estimate that the difference in the cost of mercury amalgam fillings and fillings made from material other than mercury would result in increased cost for dental procedures, but there should be no additional costs to dentists or the Dental Board as a result of the information requirements of the bill.

ADOA – State Employee Health

ADOA was not able to provide us with an estimate of how this bill would potentially affect the costs of state employee dental plans. If state employee dental plan rates increase as a result of the provisions of this bill, there could be additional state costs related to those rate increases that are not included in this analysis.

In addition, the bill requires dentists to post warnings about the dangers of exposure to mercury posed by mercury amalgam fillings. It is possible, depending upon the wording of this sign, that such a warning could cause some patients to request resin fillings instead of mercury amalgam fillings. If this occurs, the cost of bill could be greater than we have currently estimated. However, because we have no information about the wording of the sign or how it might affect individual behavior, we were not able to develop an estimate of the potential costs of this provision.

Offsetting Savings

We were also asked to examine the bill's potential savings associated with a reduction in illnesses that are known to be caused by exposure to mercury. We reviewed scientific literature on the safety of amalgams and how these compared to the side-effects of other dental restorative materials. Although there is scientific consensus that mercury exposure poses health risks to children, there does not seem to be a consensus on whether mercury amalgams cause exposure significant enough to pose a health hazard except in rare cases of allergy. Health Canada, the Canadian federal health department, acknowledges that current scientific evidence does not indicate that mercury amalgams cause mercury-related illnesses, but recommends that alternative filling materials should be considered for children and pregnant women where possible. Both the United State Public Health Service (USPHS) and the World Health Organization, however, have concluded that current scientific data does not provide evidence that dental amalgams cause health problems (except in cases of allergy) and have not made similar recommendations. The Food and Drug Administration (FDA), the National Institutes of Health, the Centers for Disease Control and Prevention, and other organizations of the USPHS continue to study this issue.

Local Government Impact

None.